

<b>GEARTECH</b>	QUALITY	No. QP3000	SHEET 1 OF 9	
	PROCEDURE	Rev. A		
Bid Solicitation and Evaluation		BY RLE	DATE	1/18/99
		CKD JRM	DATE	1/18/99
1.	Scope			
1.1	This procedure covers soliciting and evaluating bids.			
2.	Referenced Documents			
2.1	AGMA/AWEA 921-A97 Recommended Practices for Design and Specification of Gearboxes for Wind Turbine Generator Systems.			
2.2	GEARTECH Specifications:			
	CK1000	QP1000	Procurement process	
	CK2000	QP2000	Procurement specification	
	CK3000	QP3000	Bid solicitation and evaluation	
	CK4000	QP4000	Gearbox design audit	
	CK5000	QP5000	Quality assessment	
	CK6000	QP6000	Quality assurance plan	
	CK7000	QP7000	Manufacturing schedule	
3.	Terminology			
3.1	Bid solicitation- Purchaser sends request for proposal to qualified gear manufacturers with the procurement specification and other information necessary for bidders to evaluate the project and prepare proposals.			
3.2	Bid evaluation- Purchaser evaluates bids for compliance to the procurement specification, bidder experience and capability, pricing, delivery, and warranty.			
3.3	Qualified gear manufacturer- Manufacturer with proven experience and capability necessary to produce gearboxes that conform to the procurement specification.			
4.	Significance and Use			
4.1	Bid solicitation and evaluation- AGMA/AWEA 921-A97, Annex D explains the procurement process including bid solicitation and evaluation.			
5.	Procedure			
5.1	Bid solicitation- Only qualified gear manufacturers shall be asked to bid. See CK1000 through CK7000 and QP1000 through QP7000 for guidelines for bid solicitation.			
5.1.1	Bid package- Purchaser documents shall include request for proposal, bidding instructions, and the procurement specification.			
5.1.2	Bidding instructions- Sheet 2 through sheet 9 are sample bidding instructions.			
5.1.3	Procurement specification- See CK2000 and QP2000 for procurement specification guidelines.			
5.2	Bid evaluation- See CK1000 through CK7000 and QP1000 through QP7000 for guidelines for bid evaluation.			

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**BIDDING INSTRUCTIONS**

To be considered, proposals must show full understanding and compliance with Procurement Specification No. <number>. Additionally, the following requirements must be met:

- Proposals shall be received at Purchaser no later than close of business on the day specified in the Request For Proposal that invokes Procurement Specification No. <number>.
- Proposals shall be Lump Sum, First, and Firm.
- Proposals shall include the following:
  - ☐ Completed proposal including pricing, delivery, and warranty
  - ☐ List of exceptions to procurement specification
  - ☐ Preliminary Quality Assurance Plan
  - ☐ Completed questionnaire
  - ☐ Layout (assembly) drawing of gearbox
  - ☐ Outline dimension drawing of gearbox
  - ☐ Metallurgical and geometric data for all gears
  - ☐ Bearing data
  - ☐ Load/life calculations for gears and bearings
  - ☐ Lubrication data
- Proposals shall be sent to :
 

<addressee>  
 <address>  
 <address>  
 <address>
- Proposal forms : To ensure uniform proposals, bidders are required to submit the attached forms. Bidders should include their experience in design and manufacture of similar gearboxes. Technical capability, experience, price, delivery, and warranty shall be considered in bid evaluations.
- Preliminary Quality Assurance Plan : Bidders may complete and submit the attached SAMPLE QUALITY ASSURANCE PLAN for the preliminary QA Plan. However, the final QA Plan shall be the bidder's responsibility.
- Questionnaire : To avoid misunderstanding, bidders are required to submit the attached questionnaire. All questions must be answered completely. Incomplete answers may cause rejection of bid.

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BIDDING INSTRUCTIONS			
PROPOSAL			
ITEM		NET PRICE EACH	
Gearbox			
Tooling, fixtures, and cutters			
Engineering and design			
Subcontract effort			
First article tests			
Shipping			
Total cost			
DELIVERY SCHEDULE			
ITEM		CALENDER DAYS AFTER RELEASE OF PURCHASE ORDER	
Final QA plan			
Manufacturing schedule			
Engineering drawings			
Gear Forgings			
Gear heat treat			
Gear grinding			
Gearbox assembly			
Gearbox test			
Shipment			
BID CERTIFICATION			
<p>I certify that this proposal, unless otherwise noted in Exceptions to Specification, meets all requirements of Procurement Specification No. &lt;number&gt;.</p> <p>Engineering Manager : _____ Date : _____.</p> <p>Quality Assurance Manager : _____ Date : _____.</p> <p>Purchasing Agent : _____ Date : _____.</p>			
<p>Bidder Company Name :</p>			

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BIDDING INSTRUCTIONS

WARRANTY

*(Attach additional sheets if necessary)*

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Bidder Company Name :

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BIDDING INSTRUCTIONS

EXCEPTIONS TO PROCUREMENT SPECIFICATION No. <number>

*(List specific clause and propose exact wording. If there are no exceptions, please state so. Attach additional sheets if necessary)*

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Bidder Company Name :

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BIDDING INSTRUCTIONS							
SAMPLE QUALITY ASSURANCE PLAN							
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LEGEND							
<p>H = Hold Point – Operation or procedure must be witnessed by purchaser’s representative before moving component to next operation.</p> <p>W = Witness Point – Operation or procedure may be witnessed by purchaser’s representative if purchaser’s representative is present during manufacture.</p> <p>D = Document Required – Quality assurance must provide certified copy of inspection or test report to purchaser’s representative.</p>							
Procurement Specification No. <number> Rev. <letter>							
Activity	H	W	D	Procurement Specification Clause No.	Bidder Spec. No.	Bidder Clause No.	Bidder Form No.
Gear raw material	X		X				
Process	X		X				
Form	X		X				
Chemistry	X		X				
Grain size	X		X				
Hardenability	X		X				
Cleanliness	X		X				
UT inspect forgings	X		X				
Inspection of gear teeth	X		X				
Basic geometry		X	X				
Accuracy	X		X				
Root fillets		X	X				
Grinding stock removal		X	X				
Surface roughness	X		X				
Magnetic particle	X		X				
Surface temper	X		X				
Surface hardness	X		X				
Inspection frequency	X		X				
Inspection of coupons	X		X				
General	X		X				
Case hardness	X		X				
Case depth	X		X				
<p>Bidder Company Name :</p>							

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BIDDING INSTRUCTIONS							
SAMPLE QUALITY ASSURANCE PLAN							
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Activity	H	W	D	Procurement Specification Clause No.	Bidder Spec. No.	Bidder Clause No.	Bidder Form No.
Core hardness	X		X				
Case microstructure	X		X				
Carbides	X		X				
Decarburization	X		X				
Carbon content	X		X				
Microcracks	X		X				
Sec. transform. prod.	X		X				
Intergranular oxidation	X		X				
Retained austenite	X		X				
Core microstructure	X		X				
Post carburize cold treat		X	X				
Housing accuracy		X	X				
Shaft material		X	X				
Shaft hardness		X	X				
Shaft accuracy		X	X				
Shaft magnetic particle		X	X				
First article tests	X		X				
Contact patterns	X		X				
No load tests	X		X				
Lubrication	X		X				
Dykem	X		X				
Sound level	X		X				
Vibration level	X		X				
Oil leaks	X		X				
Oil sump temperature	X		X				
Corrective action	X		X				
Documentation	X		X				
Preparation for shipment	X		X				
Bidder Company Name :							

NOTES:

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BIDDING INSTRUCTIONS			
QUESTIONNAIRE			
QUESTION		RESPONSE	
1- Has bidder read and understood the procurement specification?			
2- Is bidder prepared to perform work in conformance with the procurement specification?			
3- Is bidder prepared to attend a design review meeting and present the following:			
• Completed proposal including pricing, delivery, and warranty			
• List of exceptions to procurement specification			
• Preliminary Quality Assurance Plan			
• Completed questionnaire			
• Layout (assembly) drawing of gearbox			
• Outline dimension drawing of gearbox			
• Metallurgical and geometric data for all gears			
• Bearing data			
• Load/life calculations for gears and bearings			
• Lubrication data			
4- Does bidder understand that outline, assy, and detailed gear drawings shall be supplied to purchaser after purchase order?			
5- Does bidder understand that manufacturing is not to proceed without written approval from purchaser?			
6- Does bidder understand the specification requirements for geometric quality?			
7- Does bidder understand the specification requirements for metallurgical quality?			
8- Does bidder understand the specification requirements for heat treatment coupons?			
Bidder Company Name :			

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BIDDING INSTRUCTIONS			
QUESTIONNAIRE			
QUESTION		RESPONSE	
9- Does bidder understand specification requirements for magnetic particle and surface temper inspection?			
10- Does bidder understand specification requirements for First Article Tests?			
11- Is bidder prepared to assign a technical person to be responsible for all technical interface with purchaser?			
12- Does bidder understand purchaser's representative shall witness all tests and inspections, as agreed to in QA Plan?			
13- Are all forgings 100% UT inspected, both radially and axially, at forge shop and bidders shop?			
14- Does bidder have all necessary tooling, fixtures, and cutters required to produce pinions and gears?			
15- If response to question 14 is no, provide estimated time and cost to purchaser.			
16- Will pinion and gear teeth be rough cut by hobbing or shaping?			
17- On what specific machines will pinion and gear teeth be rough cut?			
18- Will pinion and gear teeth be finished by hard cutting or grinding?			
19- On what specific machines will pinion and gear teeth be finished?			
20- On what specific machines will pinion and gear teeth be inspected?			
<p>Bidder Company Name :</p>			